



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

SR- 6J

January 30, 2012

Mr. Michael J. Erickson
Vice President
ARCADIS
10559 Citation Drive, Suite 100
Brighton, Michigan 48116

RE: Area 3: Supplemental Remedial Investigation/Feasibility Study Work Plan

Dear Mr. Erickson:

The United States Environmental Protection Agency (EPA) has completed its review of the Area 3 Supplemental Remedial Investigation/Feasibility Study (SRI/FS) Work Plan, submitted on November 29, 2011, for the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site.

This SRI/FS work plan describes the supplemental activities to be completed to augment the existing environmental data in Area 3 to complete the SRI/FS. EPA has several issues with the work plan that must be addressed, and has enclosed comments on the Area 3 SRI/FS work plan. Therefore, EPA disapproves the Area 3 SRI/FS work plan pending receipt of adequate responses to the enclosed comments and a revised report. The responses to the enclosed comments and revised report must be submitted within (60) sixty days of receipt of this letter.

Please contact me at (312) 886-0992 if you have any questions regarding this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Saric", is positioned above the typed name of the sender.

James A. Saric
Remedial Project Manager
SFD Remedial Response Branch #1

Enclosure

cc: Paul Bucholtz, MDNRE
Garry Griffith, Georgia-Pacific
Richard Gay, Weyerhaeuser

Bcc w/enclosure:

Leslie Kirby-Miles, ORC
Jeff Keiser, CH2MHILL

**U.S.EPA COMMENTS
ON THE AREA 3
SUPPLEMENTAL REMEDIAL INVESTIGATION WORK PLAN
ALLIED PAPER, INC./PORTAGE CREEK/KALAMAZOO RIVER SITE**

SPECIFIC COMMENTS

Commenting Organization: EPA
Section: 1 **Page #:** 1-5
Specific Comment #: 1

Commenter: White
Lines #: NA

Last paragraph, HHRA – please see Specific Comment #4. This paragraph will need to be revised if a gardening/produce consumption pathway is included in the HHRA.

Commenting Organization: EPA
Section: 2 **Page #:** 2-1
Specific Comment #: 2

Commenter: White
Lines #: NA

First paragraph in Section 2 – the basis for the study area boundary should be explained. Some of this information is provided on page 5-3 (Step 4 of the DQOs); please move this description to Section 2 and expand so that it is clear that the study area boundary encompasses all areas that may have been affected by historical inundation and flooding.

Commenting Organization: EPA
Section: 2.1.2 **Page #:** 2-4
Specific Comment #: 3

Commenter: Saric
Lines #: NA

Any documentation regarding the approximate amount of sediment removed in 2000 from the Pine Creek drawdown should be included. Additionally, the USGS reports identify a release of sediments from the Pine Creek drawdown, and subsequent deposition in the Otsego impoundment. The stipulated drawdown frequency for the Pine Creek impoundment (i.e., every 5 years), should be included along with the dates of historic drawdown activities.

Commenting Organization: EPA
Section: 2 **Page #:** Figure 2-1
Specific Comment #: 4

Commenter: White
Lines #: NA

The extent of the former Otsego impoundment is defined as a solid gray line in the legend; however, this line is not shown on the map. This comment also applies to Figures 2-3a and 2-3b.

Commenting Organization: EPA
Section: 3 **Page #:** 3-3
Specific Comment #: 5

Commenter: White
Lines #: NA

Second bullet – "In August 2000, MDEQ wrote a letter advising the gardener to abandon the garden, expressing concern due to the presence of PCBs." The HHRA should include an analysis of the risk associated with gardening and consuming produce using the MDEQ data to address potential public concern related to this letter.

Commenting Organization: EPA
Section: 3 **Page #:** Table 3-2, 3-3
Specific Comment #: 6

Commenter: Keiser
Lines #: NA

Data usability categories should be defined in the footnote for these tables. Are they the same as the data usability designations used in Table 3-1?

Commenting Organization: EPA
Section: 3 **Page #:** 3-5
Specific Comment #: 7

Commenter: White
Lines #: NA

First paragraph, second sentence –this sentence lists data sets that are excluded from the statistical analyses of existing data. Please add a footnote to Table 3-4 that specifies the data sets that are included in the statistical summaries.

Commenting Organization: EPA
Section: 3 **Page #:** 3-5
Specific Comment #: 8

Commenter: White
Lines #: NA

First paragraph – add a sentence to the end of the paragraph that states "However, all available data will be included and considered in the Area 3 SRI Report."

Commenting Organization: EPA
Section: 3 **Page #:** 3-5
Specific Comment #: 9

Commenter: White
Lines #: NA

Footnote 2 – This footnote indicates that PCBs were detected at concentrations up to 16 mg/kg in core FF-66 from Pine Creek. A footnote to Table 3-4 states that this location falls outside of the primary Area 3 impoundment; however, the sample results indicate that it is clearly affected by PCB contamination. Please rectify the apparent inconsistency between the footnotes in the text and table.

Commenting Organization: EPA
Section: 3 **Page #:** 3-9
Specific Comment #: 10

Commenter: White
Lines #: NA

Section 3.4.4 – it would helpful to include a map in the work plan showing the wetland areas.

Commenting Organization: EPA

Section: 4

Page #: Figure 4-1

Specific Comment #: 11

Commenter: Keiser

Lines #: NA

It appears there was approximately a 3 foot difference in surface water elevation between the 9/22 and 10/6 datasets resulting in the graph showing water moving up hill. Please use a single data set and identify where data are missing to provide a better representation of the water surface elevation along the river.

Commenting Organization: EPA

Section: 4

Page #: 4-2

Specific Comment #: 12

Commenter: White

Lines #: NA

Second line on page - "... tend to decrease quickly with distance ..." Please delete the word "quickly."

Commenting Organization: EPA

Section: 4

Page #: 4-6

Specific Comment #: 13

Commenter: White

Lines #: NA

Page 4-8, first paragraph, third sentence - "These deposits ... were typically thickest ..." Change "were" to "are."

Commenting Organization: EPA

Section: 4

Page #: 4-11

Specific Comment #: 14

Commenter: White

Lines #: NA

Section 4.6.2, third paragraph. Please see Specific Comment #4. Identify how the gardening scenario will be addressed in order to close the loop on the 2000 MDEQ letter to the gardener.

Commenting Organization: EPA

Section: 5

Page #: 5-1

Specific Comment #: 15

Commenter: White

Lines #: NA

Step 2, "Identify the Goals of the Study" - add a bullet that states "Estimate PCB-containing bank soil erosion rates"

Commenting Organization: EPA

Section: 5

Page #: 5-3

Specific Comment #: 16

Commenter: White

Lines #: NA

Step 5, Develop the Analytic Approach - Add a bullet that states "Spatial mapping of surface and core maximum sediment and floodplain soil PCB concentrations"

Commenting Organization: EPA

Section: 5.2

Page #: 5-4

Specific Comment #: 17

Commenter: Saric

Lines #: NA

Data collection for non-PCB constituents in Area 3 must follow the same approach as that of Area 2.

Commenting Organization: EPA
Section: 5 Page #: 5-5
Specific Comment #: 18

Commenter: White
Lines #: NA

River Bank and Floodplain Soil - Add a bullet that states "Floodplain soil PCB data in areas potentially affected by flooding throughout Area 3"

Commenting Organization: EPA
Section: 5 Page #: 5-8
Specific Comment #: 19

Commenter: White
Lines #: NA

Section 5.3.1.3, first bullet - "... substantial deposits/accumulations of fine-grained sediments will be noted." Clarify what is meant by "substantial" and how these deposits will be identified from a boat.

Commenting Organization: EPA
Section: 5 Page #: 5-9
Specific Comment #: 20

Commenter: White
Lines #: NA

Section 5.3.3, first paragraph - "In areas where existing PCB data are available, samples will be used to characterize final strata as an *a priori* consideration to future sampling." The meaning of this sentence is unclear; please revise to clarify.

Commenting Organization: EPA
Section: 5 Page #: 5-10
Specific Comment #: 21

Commenter: White
Lines #: NA

Section 5.3.4 - "Some random sampling may also be included outside of strata of interest to assess or confirm PCB levels in areas believed unlikely to contain elevated PCB concentrations." Please change "may" to "will."

Commenting Organization: EPA
Section: 8 Page #: Table 8-1
Specific Comment #: 22

Commenter: Keiser
Lines #: NA

Include the submittal of the locations for reconnaissance activities into the schedule.

EDITORIAL COMMENTS

Page 1-3, 3rd bullet in list of Multi-Area documents - "Multi-Area Quality Assurance Sampling Plan (QAPP)" - change "Sampling" to "Project"

Page 4-9, second paragraph - "... sediment that have ..." Change "sediment" to "sediments."